#### RAW SEQUENCE LISTING PATENT APPLICATION US/08/765,012A

DATE: 09/15/98 TIME: 15:22:05

ENTERED

INPUT SET: S28654, raw

This Raw Listing contains the General Information Section and up to the first 5 pages.

```
1
                                      SEQUENCE LISTING
 2
 3
    (1)
           General Information:
 4
    (i) APPLICANT: Wild, Hanno; Hanko, Rudolf; Dorschug, Michael;
    Horlein, Hans-Dietrich; Beunink, Jurgen;
 5
    Apeler, Heiner; Wehlmann, Hermann; and Sebald,
 7
          TITLE OF INVENTION: HIL-4 MUTANT PROTEINS USED AS
 8
    (ii)
 9
    ANTAGONISTS OR PARTIAL AGONISTS OF
    HUMAN INTERLEUKIN 4
10
    (iii) NUMBER OF SEQUENCES: 20
11
12
    (iv) CORRESPONDENCE ADDRESS:
    (A) ADDRESSEE: Sprung Kramer Schaefer & Briscoe
13
    (B) STREET: 660 White Plains Road
14
15
    (C)
         CITY: Tarrytown
16
    (D) STATE: New York
17
    (E) COUNTRY: USA
18
    (F) ZIP: 10591-5144
    (V) COMPUTER READABLE FORM:
19
20
    (A) MEDIUM TYPE: Diskette, 3.50 inch, 1.4 Mb storage
21
    (B) COMPUTER: Apple Macintosh
22
    (C) OPERATING SYSTEM: System 7.5
23
    (D) SOFTWARE: WordPerfect 3.5
24
    (vi) CURRENT APPLICATION DATA:
    (A) APPLICATION NUMBER: 08/765,012
26
    (B) FILING DATE: 19-DEC-1996
27
    (C) CLASSIFICATION:
    (vii) PRIOR APPLICATION DATA:
28
29
    (A) APPLICATION NUMBER: PCT/EP95/02358
    (B) FILING DATE: 19-JUN-1995
30
31
    (vii) PRIOR APPLICATION DATA:
32
    (A) APPLICATION NUMBER: DE 44 23 131
    (B) FILING DATE: 01-JUL-1994
33
34
    (viii) ATTORNEY/AGENT INFORMATION:
    (A) NAME: Kurt G. Briscoe
36
    (B) REGISTRATION NUMBER: 33,141
37
    (C) REFERENCE/DOCKET NUMBER: BAYER 9776-KGB
38
    (ix) TELECOMMUNICATION INFORMATION:
39
    (A) TELEPHONE: (914) 332-1700
40
    (B) TELEFAX: (914) 332-1844
41
42
43
    (2) INFORMATION FOR SEQ ID NO: 1:
44
   (i) SEQUENCE CHARACTERISTICS:
45
   (A) LENGTH: 16 base pairs
```

(B) TYPE: nucleic acid

#### RAW SEQUENCE LISTING .PATENT APPLICATION US/08/765,012A

DATE: 09/15/98 TIME: 15:22:06

```
47
    (C) STRANDEDNESS: single
    (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: cDNA
49
50
     (iii) HYPOTHETICAL: no
     (iv) ANTI-SENSE: no
51
52
     (vi) ORIGINAL SOURCE:
            (C) INDIVIDUAL ISOLATE: synthetic
53
54
     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:
55
56
    CATGCACAAG TGCGAT
                                                               16
57
58
59
    (2) INFORMATION FOR SEQ ID NO: 2:
    (i) SEQUENCE CHARACTERISTICS:
60
    (A) LENGTH: 12 base pairs
61
62
    (B) TYPE: nucleic acid
63
    (C) STRANDEDNESS: single
64
    (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: cDNA
66
    (iii) HYPOTHETICAL: no
    (iv) ANTI-SENSE: no
67
    (vi) ORIGINAL SOURCE:
68
            (C) INDIVIDUAL ISOLATE: synthetic
69
70
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
71
                                                           112
72
    ATCGCACTTG TG
73
    (2) INFORMATION FOR SEQ ID NO: 3:
74
75
    (i) SEQUENCE CHARACTERISTICS:
76
    (A) LENGTH: 21 base pairs
    (B) TYPE: nucleic acid
77
    (C) STRANDEDNESS: single
78
79
    (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: cDNA
80
81
    (iii) HYPOTHETICAL: no
82
    (iv) ANTI-SENSE: no
    (vi) ORIGINAL SOURCE:
83
            (C) INDIVIDUAL ISOLATE: synthetic
85
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
86
87
    GCCTCCAAGG ACACAACTGA G
                                                               21
88
    (2) INFORMATION FOR SEQ ID NO: 4:
89
    (i) SEQUENCE CHARACTERISTICS:
90
91
    (A) LENGTH: 24 base pairs
92
    (B) TYPE: nucleic acid
93
    (C) STRANDEDNESS: single
94
    (D) TOPOLOGY: linear
95
    (ii) MOLECULE TYPE: cDNA
96
    (iii) HYPOTHETICAL: no
97
    (iv) ANTI-SENSE: no
98
    (vi) ORIGINAL SOURCE:
99
           (C) INDIVIDUAL ISOLATE: synthetic
```

### RAW SEQUENCE LISTING PATENT APPLICATION US/08/765,012A

DATE: 09/15/98 TIME: 15:22:07

```
100
      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
101
102
     GTGAAGGAAG CCGACCAGAG TACG
                                                             24
103
104
      (2) INFORMATION FOR SEQ ID NO: 5:
      (i) SEQUENCE CHARACTERISTICS:
105
      (A) LENGTH: 36 base pairs
106
107
      (B) TYPE: nucleic acid
108
      (C) STRANDEDNESS: single
109
      (D) TOPOLOGY: linear
110
      (ii) MOLECULE TYPE: cDNA
111
     (iii) HYPOTHETICAL: no
     (iv) ANTI-SENSE: no
112
113
     (vi) ORIGINAL SOURCE:
114
             (C) INDIVIDUAL ISOLATE: synthetic
115
      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
116
117
     CTGGAGACTG CCATGGCCCA CAAGTGCGAT ATCACC
                                                            36
118
119
120
     (2) INFORMATION FOR SEQ ID NO: 6:
121
     (i) SEQUENCE CHARACTERISTICS:
122
      (A) LENGTH: 131 amino acids
123
     (B) TYPE: amino acid
      (D) TOPOLOGY: linear
124
125
     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:
126
127
128
     Met Ala His Lys Cys Asp Ile Thr Leu Gln Glu
129
130
131
     Ile Ile Lys Thr Leu Asn Ser Leu Thr Glu
132
                           15
133
134
     Gln Lys Thr Leu Cys Thr Glu Leu Thr Val
135
136
137
     Thr Asp Ile Phe Ala Ala Ser Lys Asn Thr
138
139
140
     Thr Glu Asn Glu Thr Phe Cys Arg Ala Ala
141
      40
                           45
142
143
     Thr Val Leu Arg Gln Phe Tyr Ser His His
144
145
146
     Glu Lys Asp Thr Arg Cys Leu Gly Ala Thr
147
148
149
     Ala Gln Gln Phe His Arg His Lys Gln Leu
150
151
152
     Ile Arg Phe Leu Lys Arg Leu Asp Arg Asn
```

#### RAW SEQUENCE LISTING PATENT APPLICATION US/08/765,012A

DATE: 09/15/98 TIME: 15:22:08

```
153
        80
                             85
 154
 155
       Leu Trp Gly Leu Ala Gly Leu Asn Ser Cys
 156
 157
 158
       Pro Val Lys Glu Ala Asn Gln Ser Thr Leu
 159
       100
                            105
 160
 161
       Glu Asn Phe Leu Glu Arg Leu Lys Thr Ile
 162
 163
       Met Arg Glu Lys Asp Ser Lys Cys Ser Ser
 164
 165
                            125
 166
 167
 168
       (2) INFORMATION FOR SEQ ID NO: 7:
       (i) SEQUENCE CHARACTERISTICS:
 169
       (A) LENGTH: 131 amino acids
 170
       (B) TYPE: amino acid
 171
 172
       (D) TOPOLOGY: linear
 173
       (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:
174
175
 176
       Met Ala His Lys Cys Asp Ile Thr Leu Gln Glu
 177
 178
 179
       Ile Ile Lys Thr Leu Asn Ser Leu Thr Glu
 180
 181
 182
       Gln Lys Thr Leu Cys Thr Glu Leu Thr Val
 183
 184
 185
       Thr Asp Ile Phe Ala Ala Ser Lys Asn Thr
 186
 187
 188
       Thr Glu Asn Glu Thr Phe Cys Arg Ala Ala
 189
 190
 191
       Thr Val Leu Arg Gln Phe Tyr Ser His His
 192
        50
 193
 194
       Glu Lys Asp Thr Arg Cys Leu Gly Ala Thr
 195
                             65
 196
 197
       Ala Gln Gln Phe His Arg His Lys Gln Leu
 198
 199
 200
       Ile Arg Phe Leu Lys Arg Leu Asp Arg Asn
 201
 202
 203
       Leu Trp Gly Leu Ala Gly Leu Asn Ser Cys
 204
 205
```

## RAW SEQUENCE LISTING . PATENT APPLICATION US/08/765,012A

DATE: 09/15/98 TIME: 15:22:08

206	Pro	Val	Lys	Glu	Ala	Asn	Gln	Ser	Thr	Leu
207	100					105				
208										
209	Glu	Asn	Phe	Leu	Glu	Arg	Leu	Lys	Thr	Ile
210	110					115				
211										
212	Met	Asp	Glu	Lys	Asp	Ser	Lys	Cys	Ser	Ser
213	120					125				
214										
215										
216	(2)	INFO	RMAT	NOI	FOR	SEQ	ID N	10: 8	<b>3</b> :	
217	(i)	SEQU	JENCE	CHA	RACT	ERIS	STICS	<b>:</b>		
218	(A)	LENG	TH:	131	amir	o ac	cids			
219	(B)	TYPE	E: an	nino	acid	i				
220	(D)	TOPO	LOGY	?: li	near	:				
221	(xi)	SEÇ	UENC	E DE	ESCRI	PTIC	on:	SEQ	ID N	io: 8:
222										
223										
224	Met	Ala	His	Lys	Cys	Asp	Ile	Thr	Leu	Gln Glu
225			1	_	_	_	5			
226										
227	Ile	Ile	Lys	Thr	Leu	Asn	Ser	Leu	Thr	Glu
228	10		-			15				
229										
230	Gln	Lys	Thr	Leu	Cys	Thr	Glu	Leu	Thr	Val
231	20	-			-	25				
232										
233	Thr	Asp	Ile	Phe	Ala	Ala	Ser	Lys	Asn	Thr
234	30	-				35		-		
235										
236	Thr	Glu	Asn	Glu	Thr	Phe	Cys	Arg	Ala	Ala
237	40					45	•	_		
238										
239	Thr	Val	Leu	Arg	Gln	Phe	Tyr	Ser	His	His
240	50					55	-			
241										
242	Glu	Lys	Asp	Thr	Arg	Cys	Leu	Gly	Ala	Thr
243	60	_			_	65		_		
244										
245	Ala	Gln	Gln	Phe	His	Arg	His	Lys	Gln	Leu
246	70					75				
247										
248	Ile	Arg	Phe	Leu	Lys	Arg	Leu	Asp	Arg	Asn
249	80					85				
250										
251	Leu	Trp	Gly	Leu	Ala	Gly	Leu	Asn	Ser	Cys
252	90	_	_			95				
253										
254	Pro	Val	Lys	Glu	Ala	Asn	Gln	Ser	Thr	Leu
255	100					105				
256										
257	Glu	Asn	Phe	Leu	Glu	Arg	Leu	Lys	Thr	Ile
258	110					115				

# SEQUENCE VERIFICATION REPORT .PATENT APPLICATION US/08/765,012A

DATE: 09/15/98 TIME: 15:22:09

INPUT SET: S28654.raw

Line

Error

Original Text